

Inflation im Euroraum – Ursachen und Ausblick

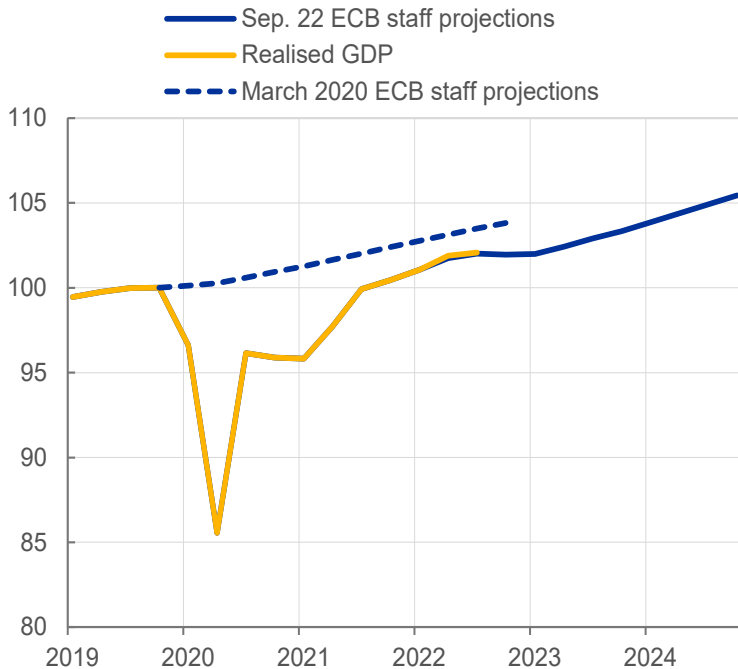
Prof. Dr. Isabel Schnabel, Mitglied des Direktoriums der EZB

IG Metall Konjunkturgespräch, 29. November 2022

Wirtschaftswachstum und Inflation im Euroraum seit Beginn der Pandemie

Reales Bruttoinlandsprodukt

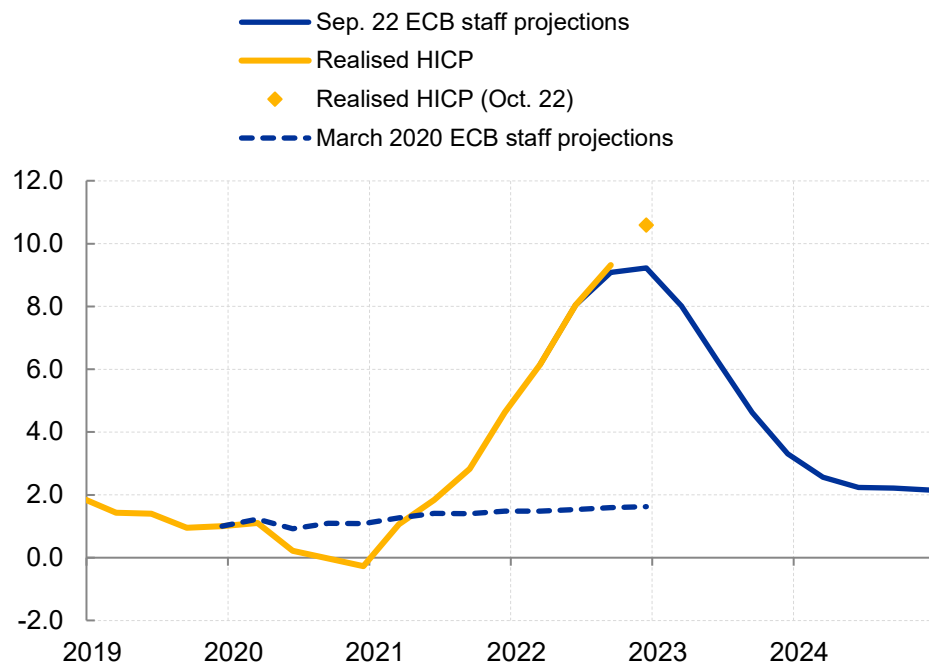
(Index: Q4 2019 = 100)



Sources: Eurostat, ECB and Eurosystem.
Latest observation: Q3 2022.

Inflationsrate

(Jahreswachstumsraten HVPI, in %)

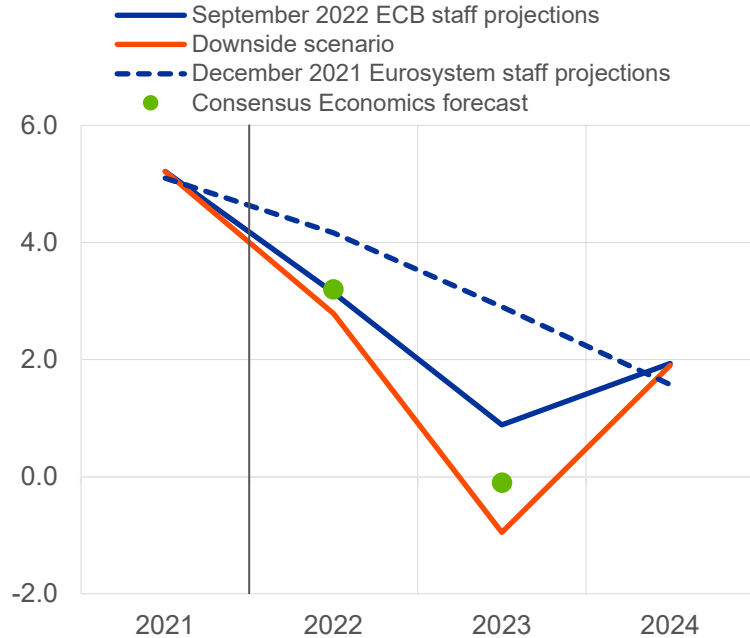


Sources: Eurostat, ECB and Eurosystem.
Latest observation: Q3 2022, October 2022 for HICP.

Spürbare negative Auswirkungen des Krieges auf die wirtschaftliche Entwicklung

Projektionen des realen BIP-Wachstums

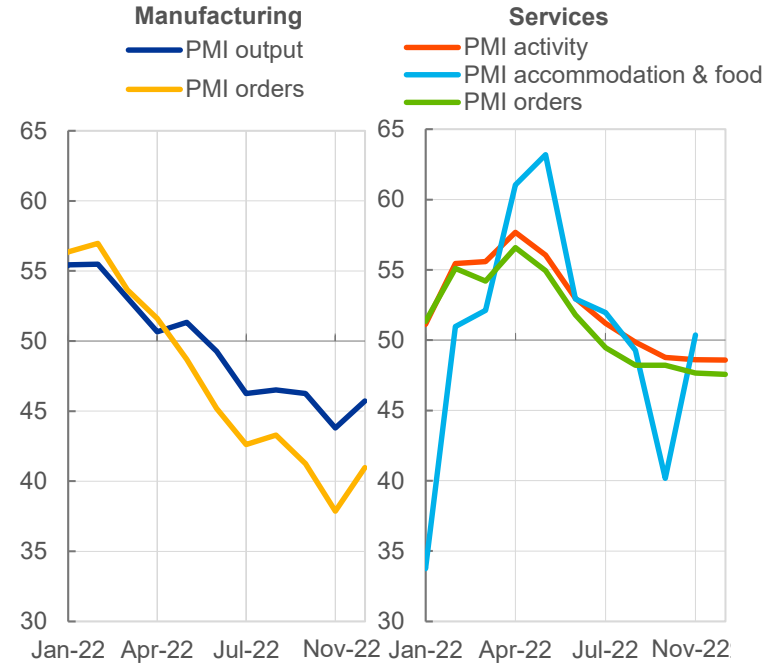
(jährliche prozentuale Veränderungen)



Sources: Eurosystem and Consensus Economics.
Note: Consensus Economics survey date 7 November 2022.

Einkaufsmanagerindex im Euroraum

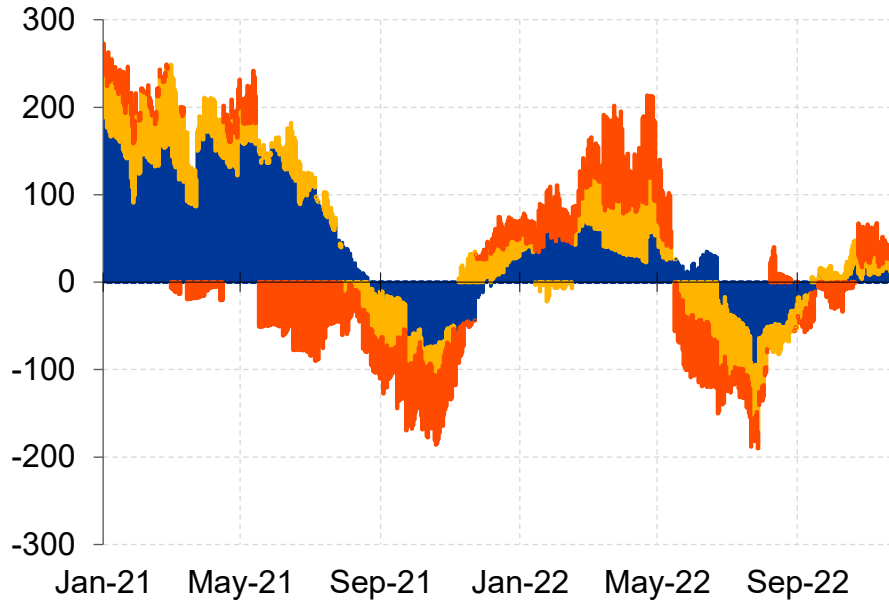
(Index)



Source: S&P Global.
Latest observation: October 2022 for PMI accommodation and food,
November 2022 otherwise

Citigroup Economic Surprise Index in wichtigen Volkswirtschaften

■ Euro area ■ United States ■ China



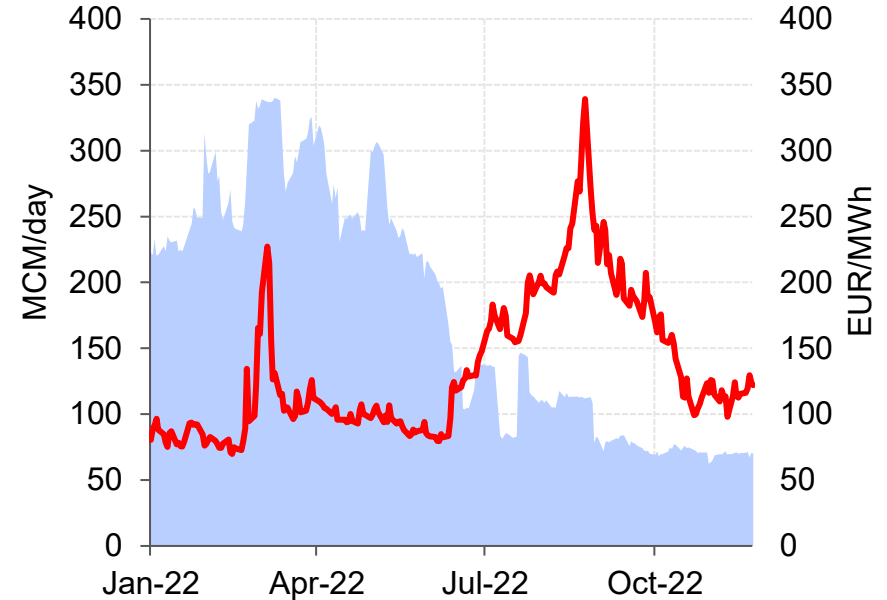
Sources: Bloomberg and ECB calculations.

Notes: The data shows economic data surprises relative to market expectations. A positive (negative) reading means that data releases have been stronger (weaker) than expected.

Latest observation: 24 November 2022.

EU-Gaspreise und Gaslieferungen von Russland nach Europa

■ Russian natural gas flows to Europe
— EU Natural Gas (rhs)



Sources: Bloomberg and ECB calculations.

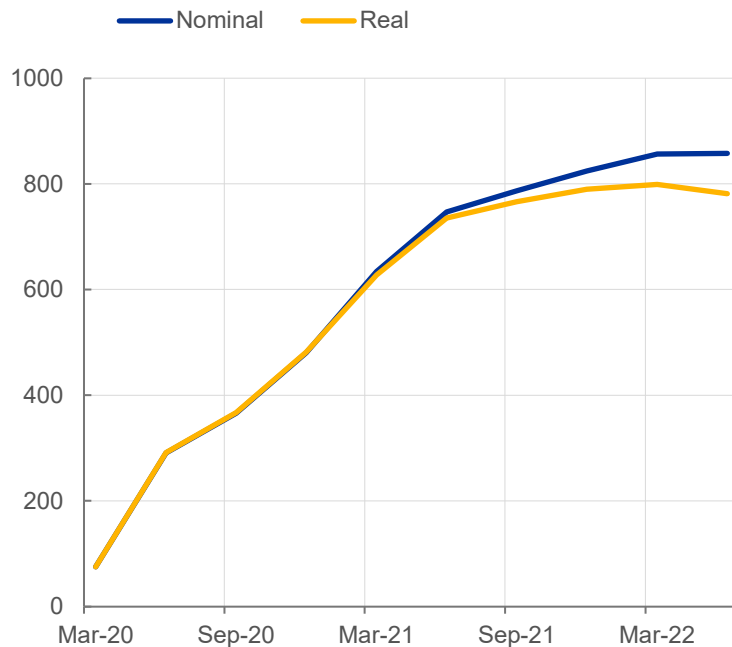
Notes: The chart shows natural gas prices in Europe (Dutch TTF futures) in addition to natural gas pipeline flows from Russia to Europe (via Nord Stream to Germany, Yamal to Poland, Ukraine and Bulgaria).

Latest observation: 24 November 2022.

Überschussersparnisse stützen Nachfrage, gefüllte Auftragsbücher in der Industrie

Akkumulierte Überschussersparnisse

(seit 2019 Q4; EUR Mrd.)



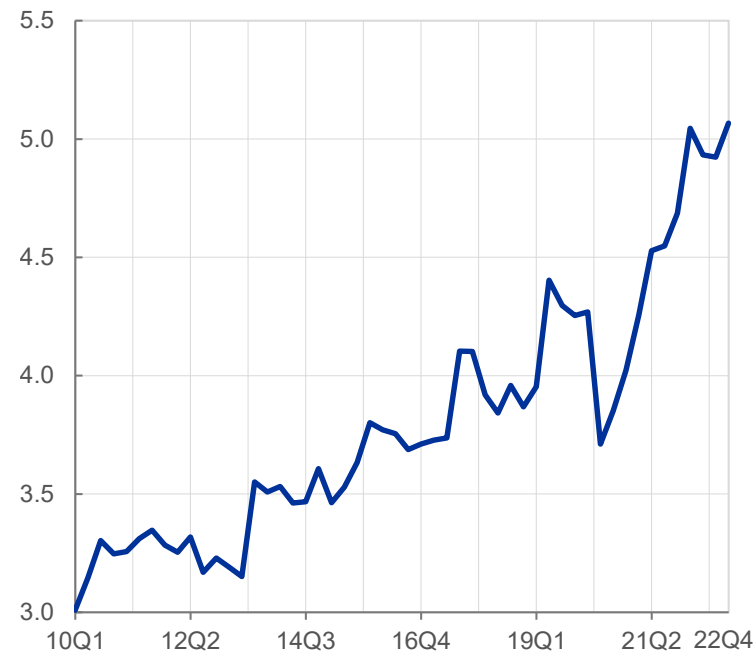
Source: Eurostat, ECB and ECB calculations.

Notes: The calculations follow Aladangady, A., Cho, D., Feiveson, L. and Pinto, E., "Excess Savings during the COVID-19 Pandemic," FEDS Notes, October 21, 2022. The real stock of excess savings is the nominal stock deflated by the HICP.

Latest observation: 2022Q2.

Auftragsbestand in der Industrie

(Anzahl an Monaten)



Source: European Commission Business Survey.

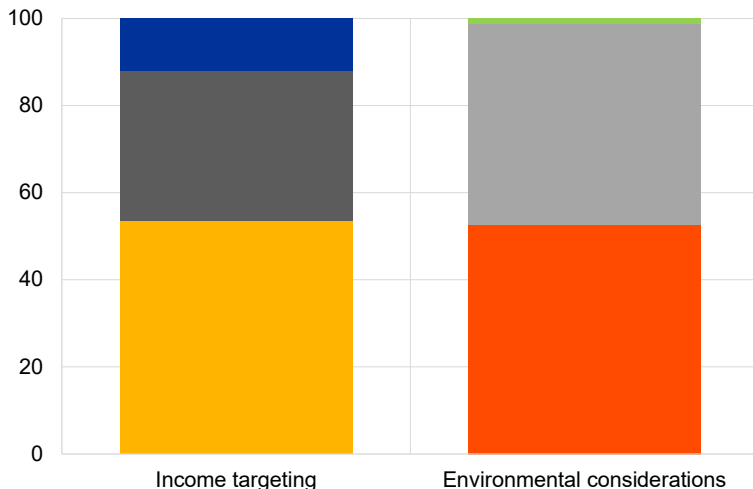
Notes: Industry backlog refers to the number of months of production assured by current order book levels.

Latest observation: 2022Q4.

Maßnahmen im Euroraum zur Eindämmung der hohen Energiepreise im Jahr 2022

(Anteil am Budget)

- Non-targeted support for households
- Supporting short-run fossil fuel consumption
- Transfers to firms and other non-targeted measures
- Environmentally neutral and/or not classifiable
- Targeted support for low-income households
- Contributing directly to the green transition

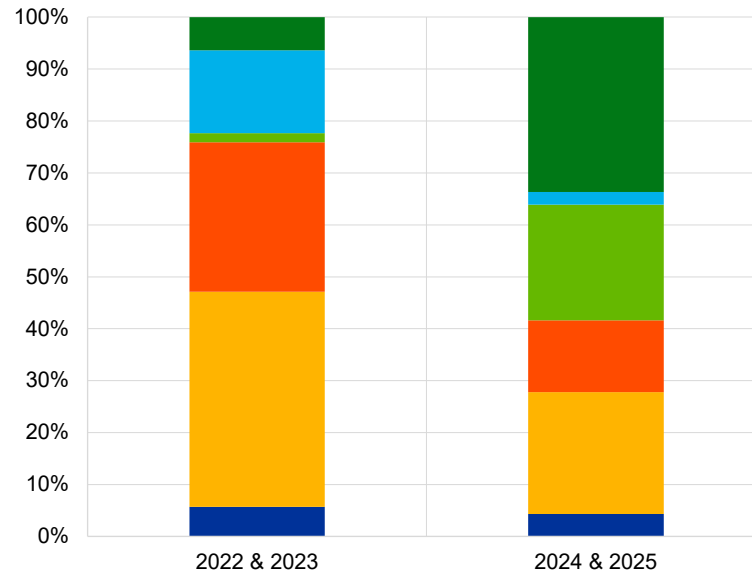


Source: ECB Economic Bulletin Issue 5, 2022: Euro area fiscal policy response to the war in Ukraine and its macroeconomic impact. (https://www.ecb.europa.eu/pub/economic-bulletin/focus/2022/html/ecb.ebbox202205_07~6db6f2c297.en.html)

Fiskalmaßnahmen im Euroraum nach Instrument

(Anteil an gesamter kriegsbedingter Unterstützung)

- Government consumption
- Subsidies
- Other transfers
- Government investment
- Indirect taxes
- Direct taxes and social contributions



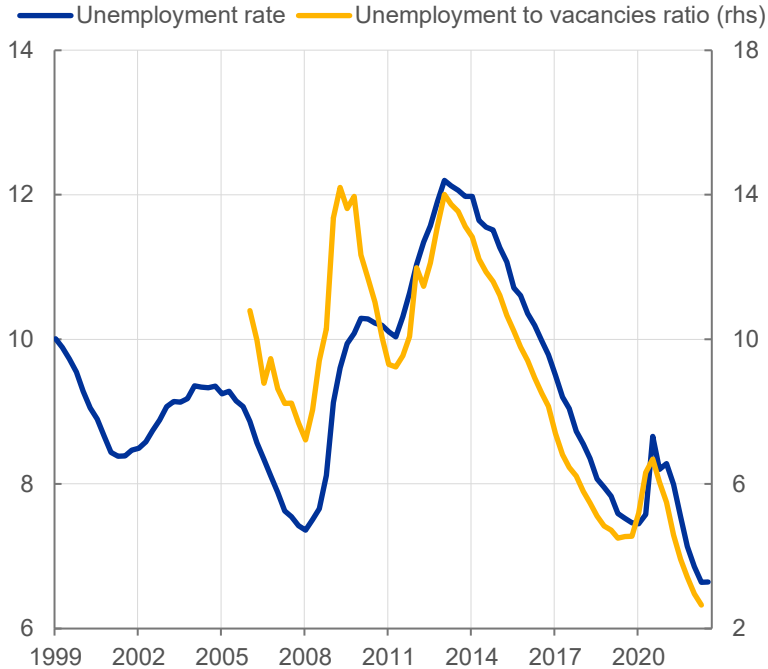
Source: ECB calculations.

Notes: The bars show the average shares in the total Ukraine war-related fiscal support.

Arbeitslosenquote auf Rekordtief bei zunehmender Arbeitskräfteknappheit

Arbeitslosenquote und Verhältnis der Zahl der Arbeitslosen zur Zahl der offenen Stellen

(links: Prozent; rechts: Verhältnis)



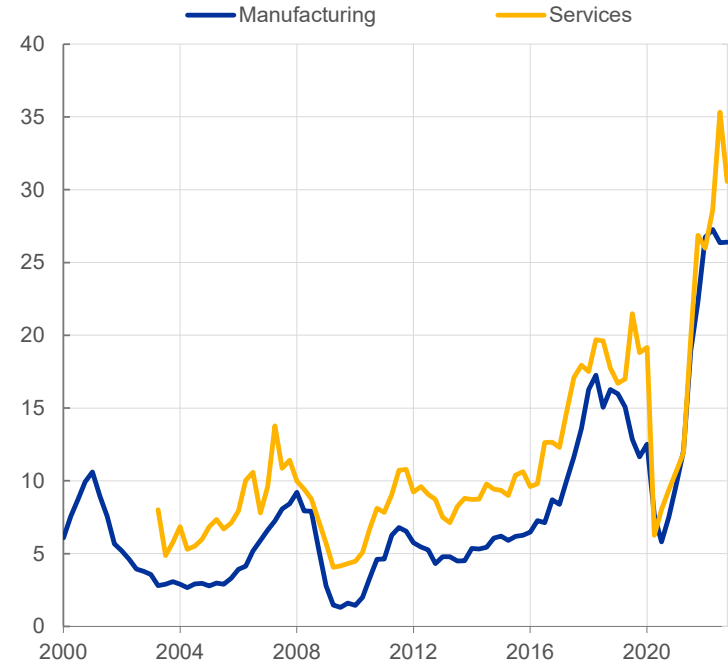
Sources: Eurostat, Haver Analytics and ECB staff calculations.

Notes: Eurostat vacancies are reported only in firms with 10 or more employees in France.

Latest observations: 2022 Q3.

Beschränkung der Produktion: Knappheit an Arbeitskräften

(Prozentpunkte)



Source: European Commission.

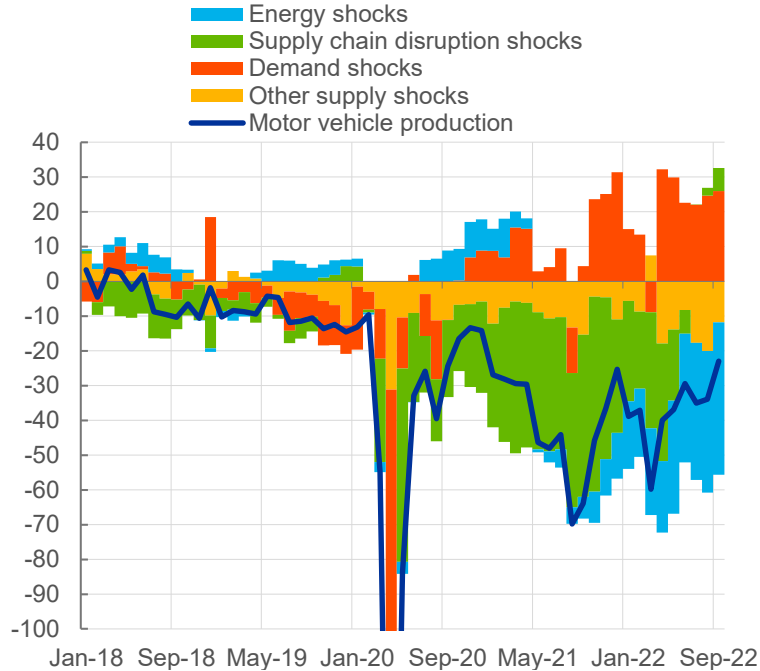
Notes: Survey in industry and the services sector: percentage of firms who indicate labour shortages as limits on production and business.

Latest observation: 2022 Q4 (October 2022).

Spürbarer negativer Effekt höherer Energiepreise auf das Produktionspotenzial

Autoproduktion – Beiträge der Schocks

(prozentuale Abweichung vom Trend, Prozentpunkte)

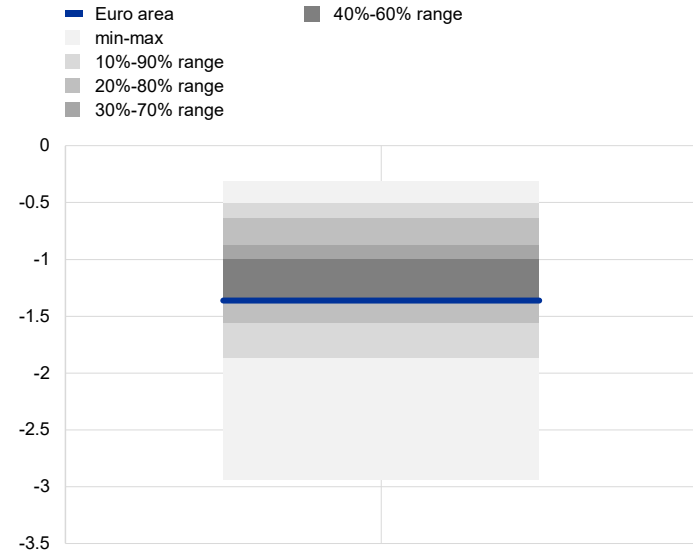


Sources: Eurostat, Markit and ECB staff calculations.

Notes: The Bayesian SVAR includes Motor vehicle production, car prices, HICP energy and PMI suppliers' delivery times. Shocks are identified using sign and narrative restriction methods. Technical details on the method can be found in De Santis, R. A. and Van der Veken, W. (2022), "Deflationary Financial Shocks and Inflationary Uncertainty Shocks: An SVAR Investigation", Working Paper Series, No 2727, ECB. Last observation: Sep. 2022.

Effekt des Anstiegs der Energiepreise auf das Produktionspotenzial

(prozentuale Abweichung)

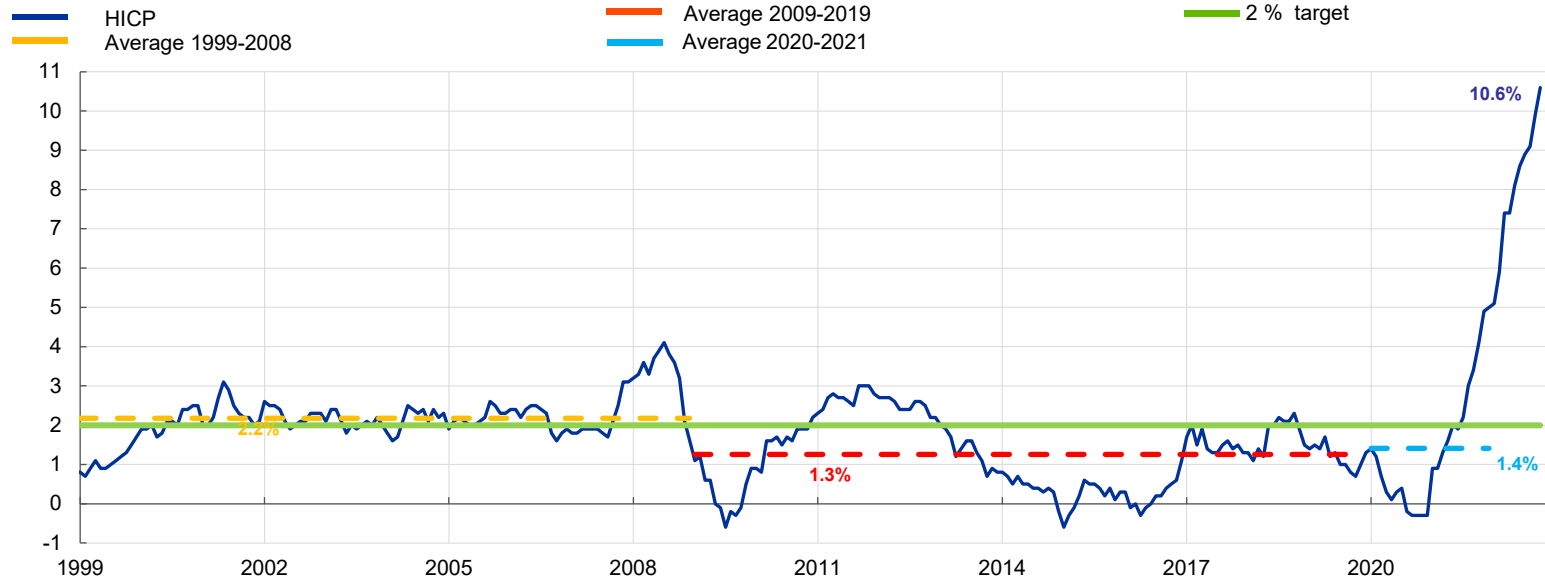


Source: ECB calculations based on the Basic Model Elasticities.

Notes: The scenario is based on the September 2022 ECB staff macroeconomic projections, in deviation from a counterfactual where the price of the synthetic energy price is fixed at the average for the period from the fourth quarter of 2017 to the first quarter of 2019. The synthetic energy price is a combination of oil and gas spot and futures prices, where their respective growth rates are weighted (80% oil, 20% gas). Around the euro area average, shaded areas denote the deciles of the impact of the current energy price shock on the level of potential output after four years, by country, for the nineteen euro area countries.

Steiler Anstieg der Inflation seit 2021 nach langer Phase niedriger Inflation

Inflation im Euroraum (jährliche Veränderung in %)

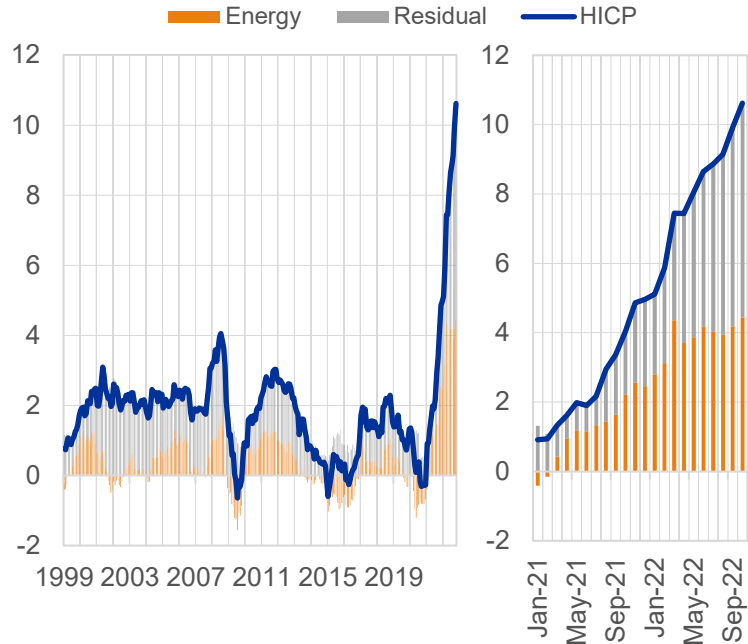


Source: Eurostat and ECB staff calculations.
Latest observation: October 2022.

Steigende Energiepreise sind wesentlicher Treiber der Inflation im Euroraum

Beitrag der Energie zum HVPI

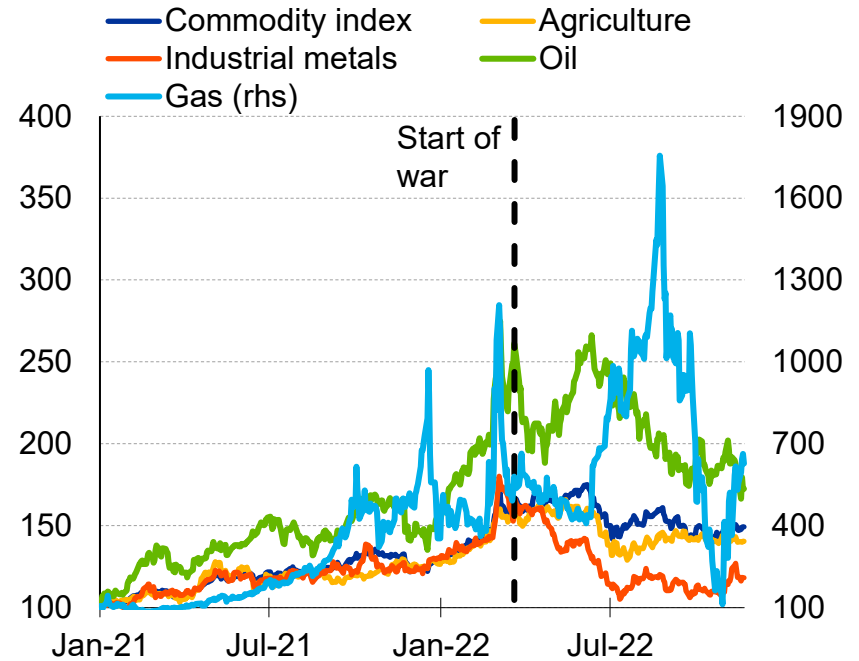
(jährliche prozentuale Änderungen; Beitrag in Prozentpunkten)



Sources: Eurostat and ECB staff calculations.
Latest observation: October 2022.

Rohstoffpreise

(Index: 1 Januar 2021 = 100)



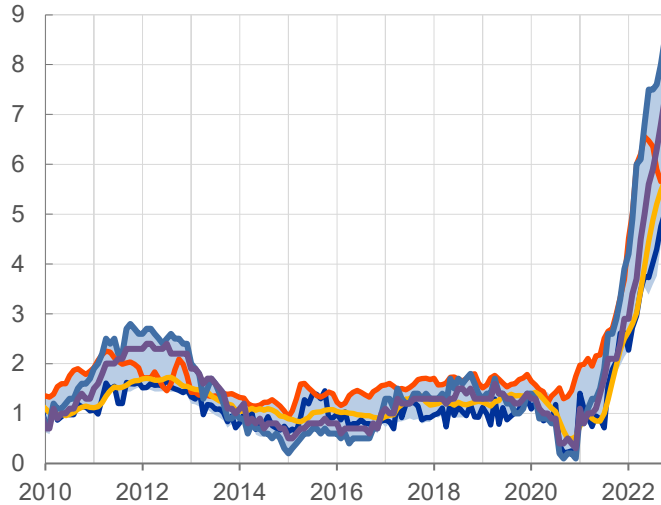
Sources: Bloomberg, Refinitiv and ECB calculations.
Latest observation: 24 November 2022.

Steiler Anstieg der zugrundeliegenden Inflation mit zunehmender Ausbreitung

Zugrundeliegende Inflation

(jährliche prozentuale Veränderungen)

- HICP excl. energy and food (HICPX)
- PCCI (persistent and common component of inflation)
- Supercore
- Trimmed mean (10%)
- Trimmed mean (30%)



Sources: ECB and ECB staff calculations.

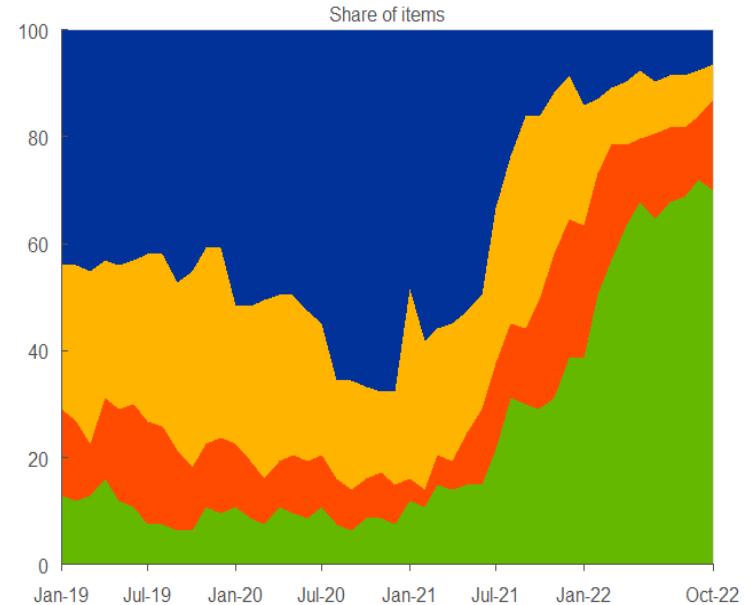
Notes: HICPX, Supercore and Trimmed means are non-seasonally adjusted, while PCCI is based on seasonally adjusted price series.

Latest observation: October 2022.

Anteil der HVPI-Komponenten nach Preissteigerungsrate

(Prozent)

- Below 1%
- Between 1% and 2%
- Between 2% and 3%
- Above 3.0%

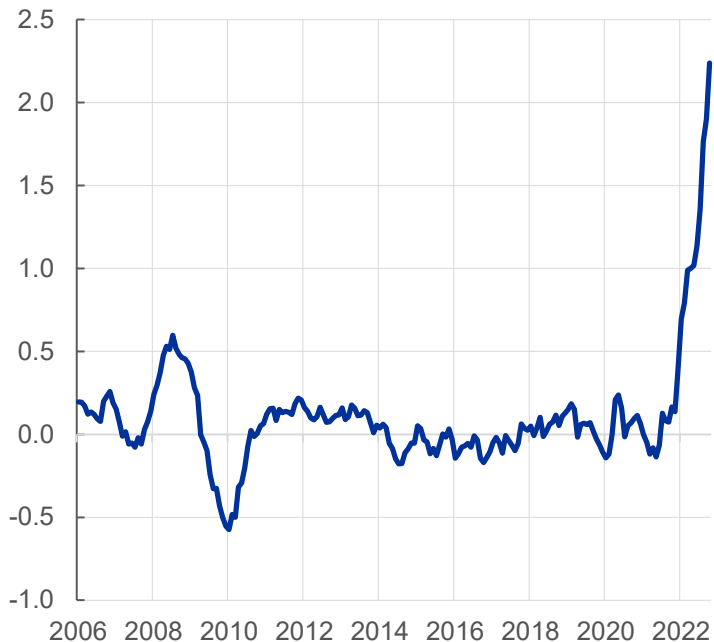


Sources: ECB and ECB staff calculations.

Latest observation: October 2022.

Unterschied in der Inflationsrate zwischen niedrigstem und höchstem Einkommensquintil

(Prozentpunkte; ohne Wohnkosten)

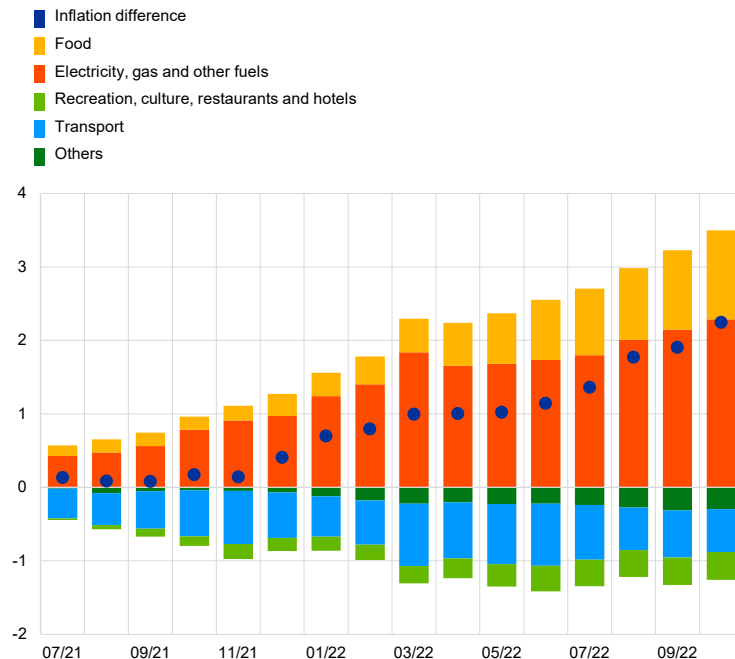


Source: Eurostat, Household Budget Survey, Istat and ECB calculations.

Notes: Quintile-specific inflation rates are calculated based on quintile-specific consumption baskets and are calculated excluding spending on "Rents and Owner-occupied housing costs". Weights based on the household budget survey are updated annually in line with updates of official HICP weights. See Charalampakis et al. (2022): "The impact of the recent rise in inflation on low-income households" ECB Economic Bulletin Box issue 7 2022
Latest observation: October 2022

Zerlegung des Unterschieds der Inflation zwischen niedrigstem und höchstem Einkommensquintil

(Prozentpunkte)



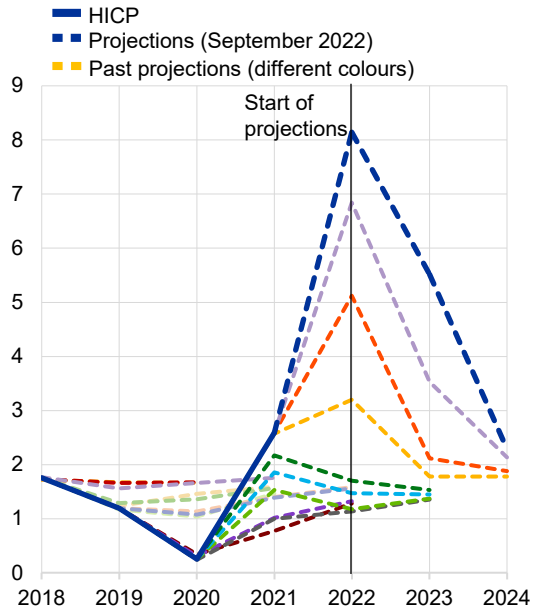
Sources: Eurostat Household Budget Survey, ISTAT and ECB calculations.

Notes: The contributions of individual components are calculated as the component-level inflation rate multiplied by the difference in the weights of the component in the quintile-specific consumption baskets. Quintile-specific inflation rates are calculated excluding spending on "rents and owner-occupied housing costs". Weights based on the HBS are updated annually in line with updates to the official HICP weights.

Prognosen zeigen spürbaren Rückgang der Inflation, aber wiederholte Fehlprognosen

Inflationsprognosen für HVPI

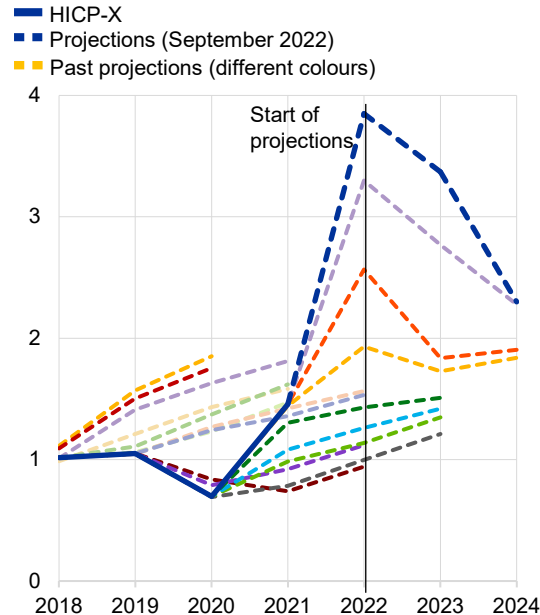
(jährliche Veränderung in %)



Sources: Eurostat, ECB and Eurosystem.
Latest observation: 2021 for HICP and HICP-X (annual data).

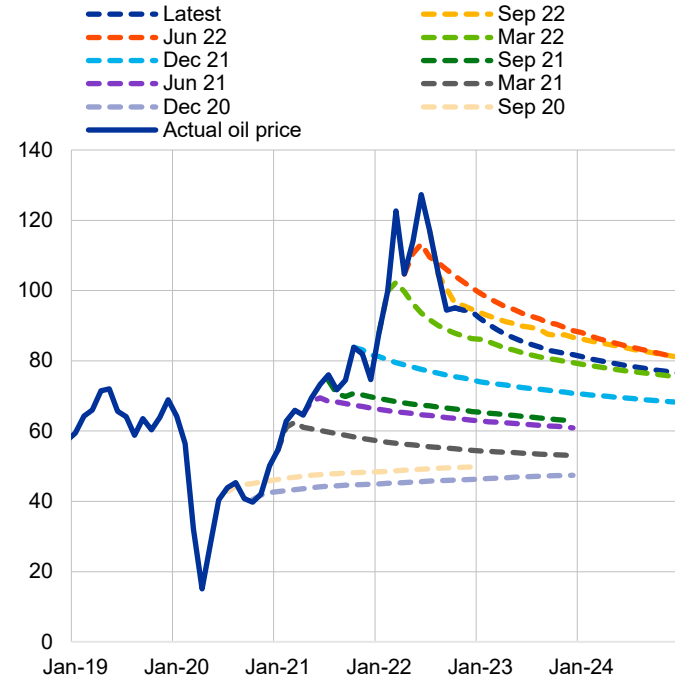
Inflationsprognosen für HVPI-X

(jährliche Veränderung in %)



Ölpreise und Annahmen

(USD per Barrel)



Sources: Refinitiv and ECB.
Notes: Dashed lines refer to oil price assumptions in respective ECB and Eurosystem staff projection exercises. Oil price futures curves are calculated using 10 business day averages.
Latest observations: October 2022 for monthly data, 23 November 2022 for latest assumptions.

Deutliches Anziehen des Lohnwachstums bei stark sinkenden Realeinkommen

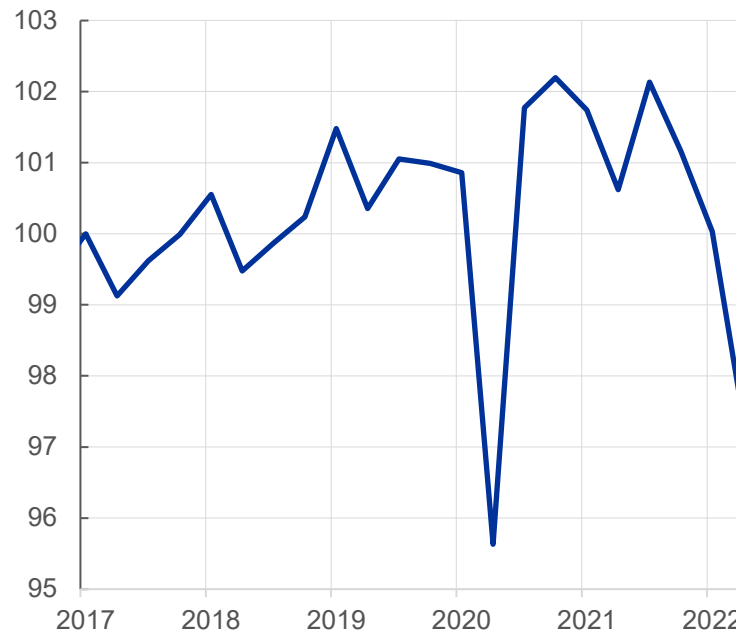
Tariflöhne und nominales Lohnwachstum in Stellenanzeigen

(jährliche prozentuale Veränderung)



Reale Entlohnung pro Arbeitnehmer

(Index: 2017 Q1 = 100)



Sources: Adrjan, Pawel & Reamonn Lydon (2022), [Wage Growth in Europe: Evidence From Job Ads](#) – Central Bank of Ireland - Economic letter - Vol 2022, No. 7 (November) and ECB.

Latest observation: 2022 Q2 for negotiated wages and October 2022 for Indeed data.

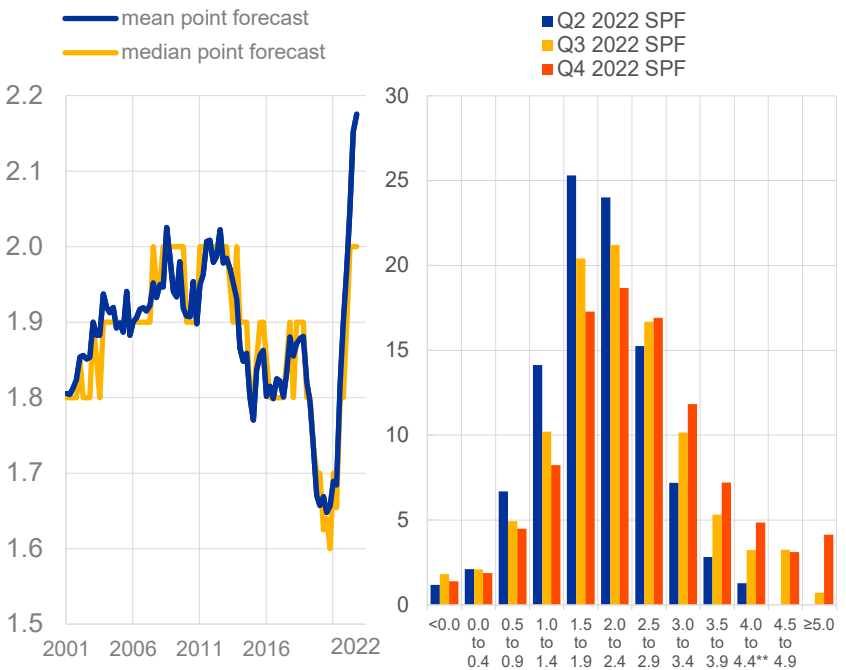
Source: Eurostat and ECB calculations.

Notes: Compensation per employee is deflated using the HICP. Latest observation: 2022Q2.

Inflationserwartungen weitgehend verankert, aber Risiko der Entankerung

Survey of Professional Forecasters: langfristige Inflationserwartungen (links) und 2024 (rechts)

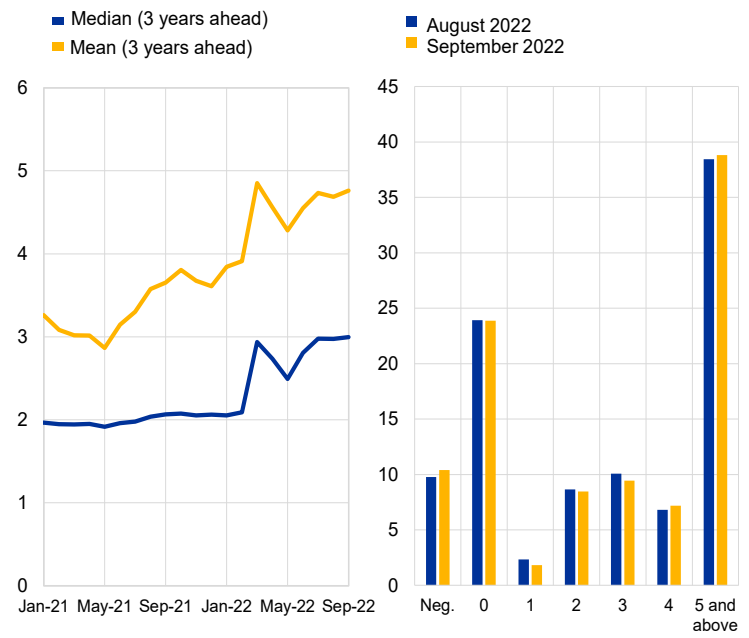
(links: jährliche prozentuale Veränderungen; rechts: Prozent)



Sources: ECB SPF.
Latest observations: 2022 Q4 (October).

Consumer Expectations Survey der EZB: Inflationserwartungen in 3 Jahren

(links: jährliche prozentuale Veränderungen; rechts: x-Achse: jährliche prozentuale Veränderungen, y-Achse: Anteil)

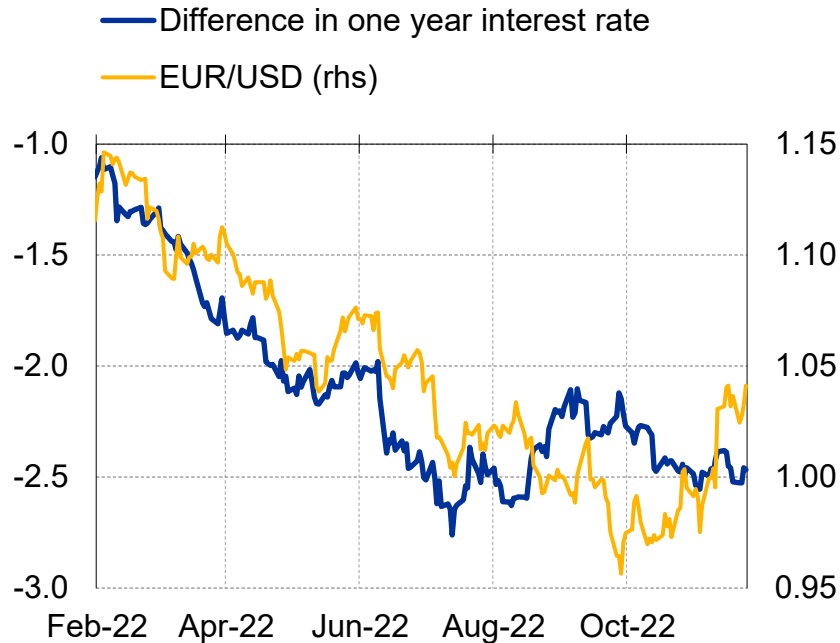


Sources: ECB Consumer Expectations Survey and ECB staff calculations.
Notes: "Median" refers to the median across individual respondents. The data are winsorised at the 2nd and 98th percentile. Mean values are 4.69% and 4.76% for August and September respectively. Median values are 2.98% and 3.00% for August and September respectively.
Latest observations: September 2022.

Abwertung des Euro aufgrund divergierender Geldpolitik, aber jüngst Umkehrung

Dollar-Wechselkurs und Zinsdifferenzen

(links: Differenz in 1Y OIS; rechts: USD per EUR)



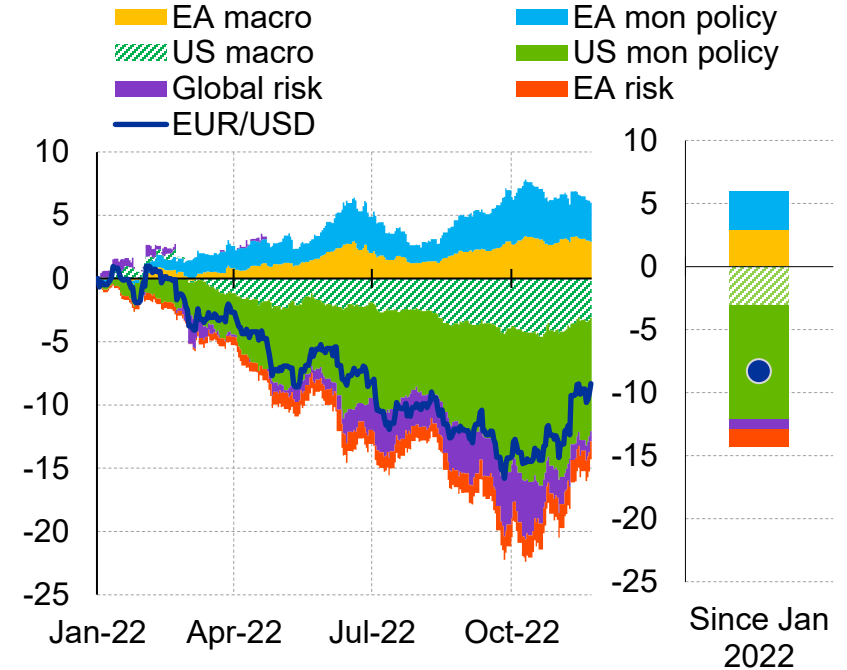
Source: Bloomberg and ECB.

Notes: Blue lines depicts the differential of Euro Area and US (EA-US) one-year OIS rates.

Latest observation: 24 November 2022.

Treiber des EUR/USD-Wechselkurses

(links: kumulierte Änderungen seit Jan-22; rechts: Prozent)



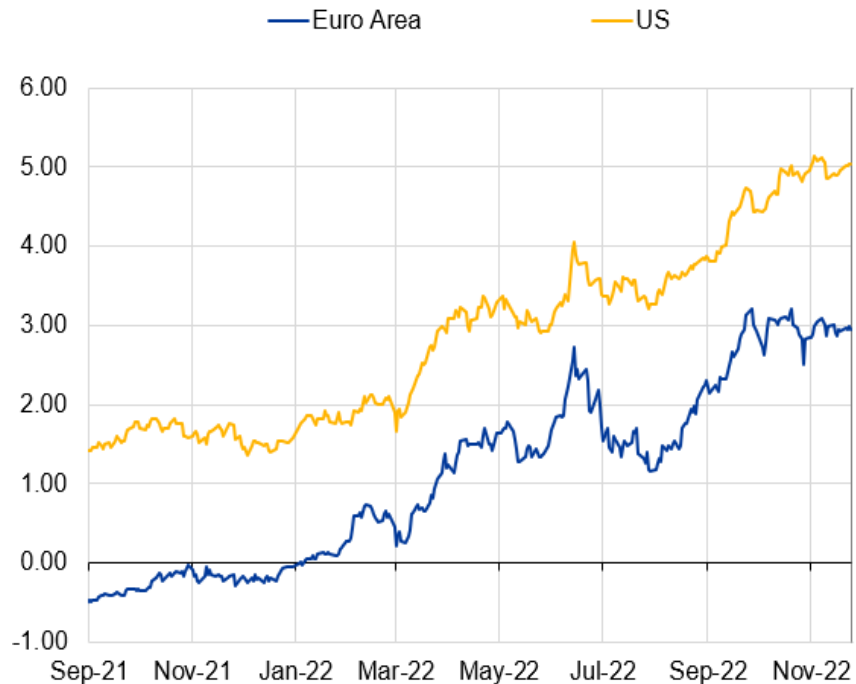
Source: ECB and ECB staff calculations.

Notes: Based on 2-country BVAR including 10-year EA OIS rate, EA GDP-weighted sovereign spread, EA stock price, EUR/USD, 10-year EA OIS -US Treasury spread & US stock prices. Identification via sign and narrative restrictions & estimated using daily data 2005-22. Decrease denotes a euro depreciation against the US dollar.

Latest observation: 24 November 2022.

Markterwartungen des höchsten zukünftigen kurzfristigen Zinssatzes

(% pro Jahr)

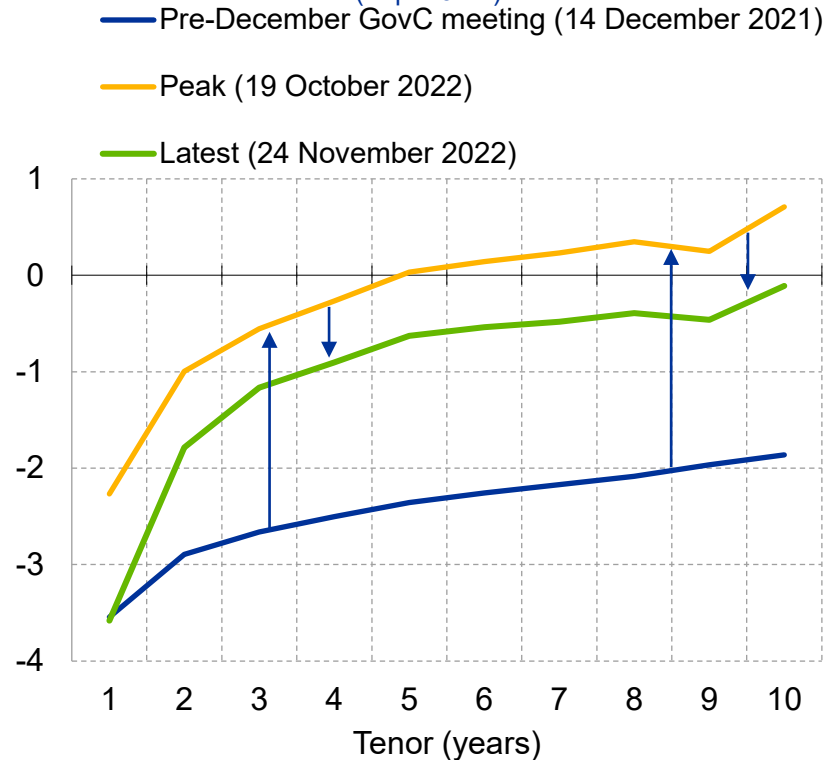


Sources: Morgan Stanley, Bloomberg, ECB and ECB calculations.

Notes: The terminal rate for the euro area is derived from the euro overnight index swap (OIS) forward curve by capturing the first local peak within a five-year horizon for each observation. The terminal rate for the United States is an estimate calculated by Morgan Stanley. Latest observation: 24 November 2022.

BIP-gewichtete reale Zinsstrukturkurve im Euroraum

(% pro Jahr)



Sources: SDW and ECB calculations.

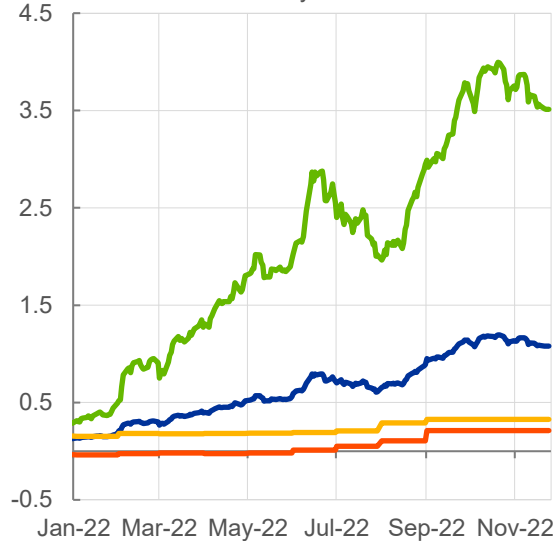
Latest observation: 24 November 2022.

Steigende Finanzierungskosten für Banken, Unternehmen und Haushalte, Realzinsen weiter niedrig

Finanzierungskosten für Banken

(% pro Jahr)

- Composite funding cost
- Deposit rates for households
- Deposit rates for NFCs
- Bank bond yields

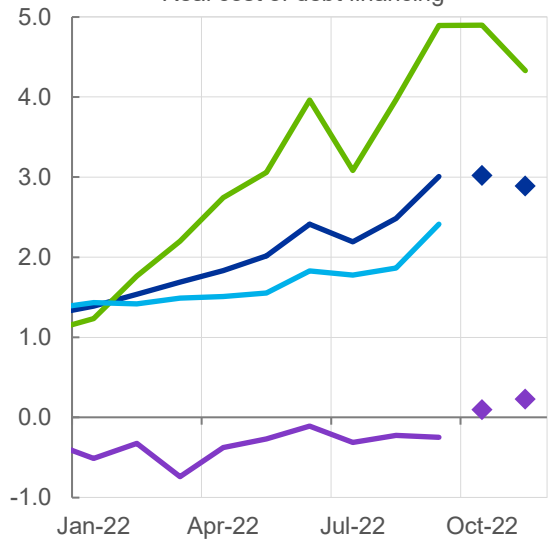


Sources: ECB (MIR, BSI), IHS Markit iBoxx and ECB calculations. Notes: Composite funding cost is the weighted average of the cost of deposits and market debt funding, with the respective outstanding amounts on bank balance sheets used as weights. Deposit rates are on new business. Calculated assuming that deposit rates remain at their September level until 24 November 2022. Latest observations: September 2022 for BSI and MIR; 24 November 2022 for iBoxx.

Finanzierungskosten für Firmen

(% pro Jahr)

- Nominal cost of debt financing
- Cost of market-based debt
- Cost of bank borrowing
- Real cost of debt financing

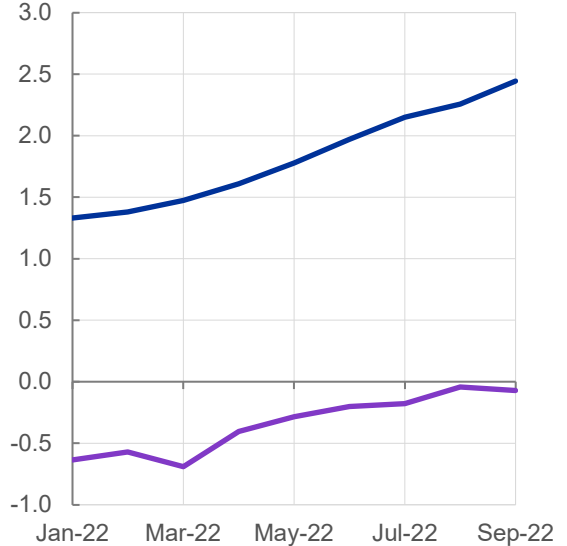


Sources: ECB (MIR, QSA), Merrill Lynch, Refinitiv, Bloomberg, Consensus Economics and ECB calculations. Notes: The diamonds refer to estimates assuming the cost of bank borrowing remained at its September 2022 level in October and November 2022. Latest observations: September 2022 for the nominal and real cost of debt financing and bank borrowing; 24 November 2022 for the cost of market-based debt.

Baufinanzierungskosten für Haushalte

(% pro Jahr)

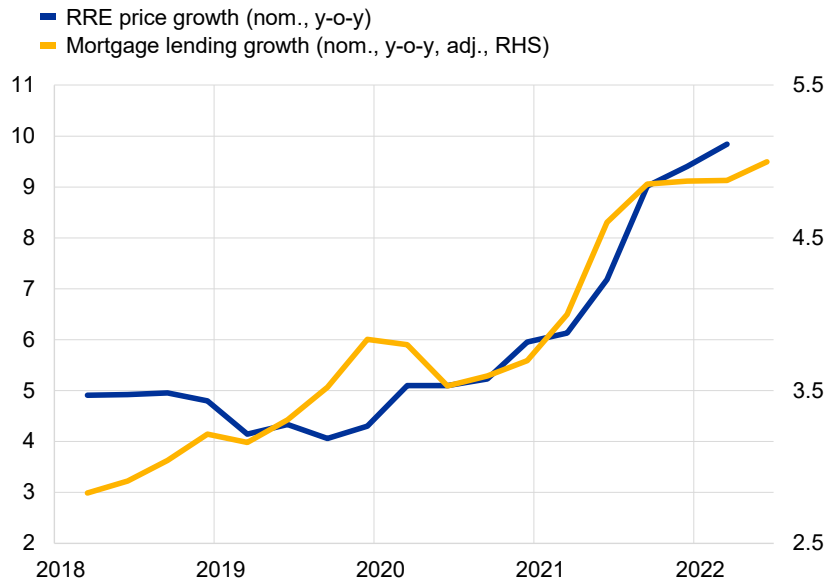
- Nominal cost of borrowing
- Real cost of borrowing



Sources: ECB (MIR), Bloomberg, Consensus Economics and ECB calculations. Notes: The cost of borrowing indicator for households for house purchase is calculated by aggregating short- and long-term rates on new loans for house purchase using a 24-month moving average of new business volumes. Latest observations: September 2022.

Hauspreise und Wohnimmobilienkredite

(Prozent)

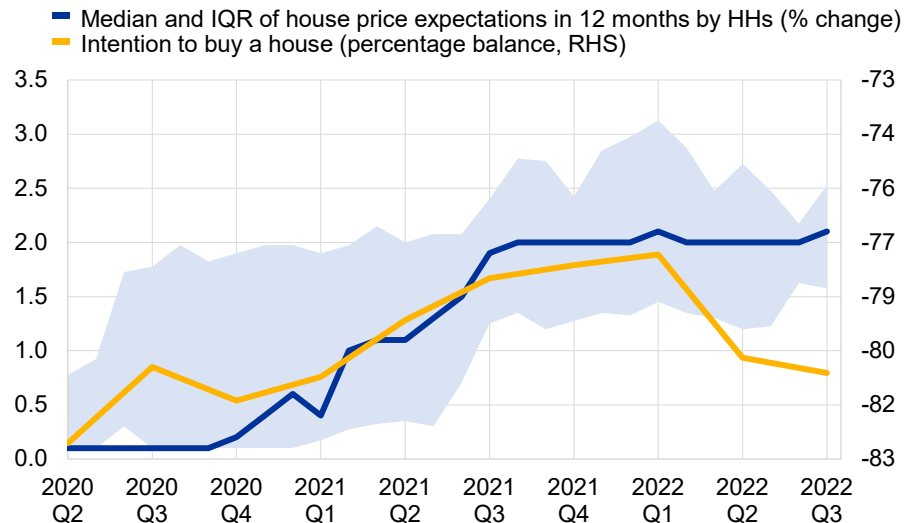


Sources: ECB and ECB calculations.

Latest observation: RRE price growth (nom., y-o-y) 2022 Q1, Mortgage lending growth (nom., y-o-y, adj., RHS) 2022 Q2.

Erwartungen der Haushalte für Häuserpreise und Absicht eines Hauskaufs in den nächsten 12 Monaten

(Prozent; Median und Interquartilsabstand (IQR))

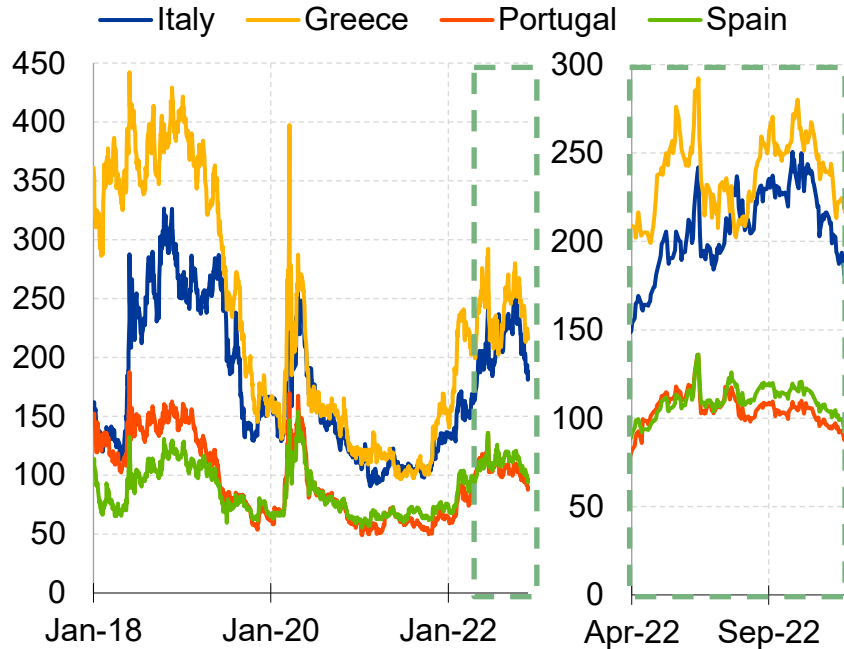


Sources: CES, European Commission and ECB calculations.

Latest observation: September 2022 for house price expectations and 2022 Q3 for intention to buy a house.

Renditedifferenzen zu 10-jährigen deutschen Staatsanleihen (Basispunkte)

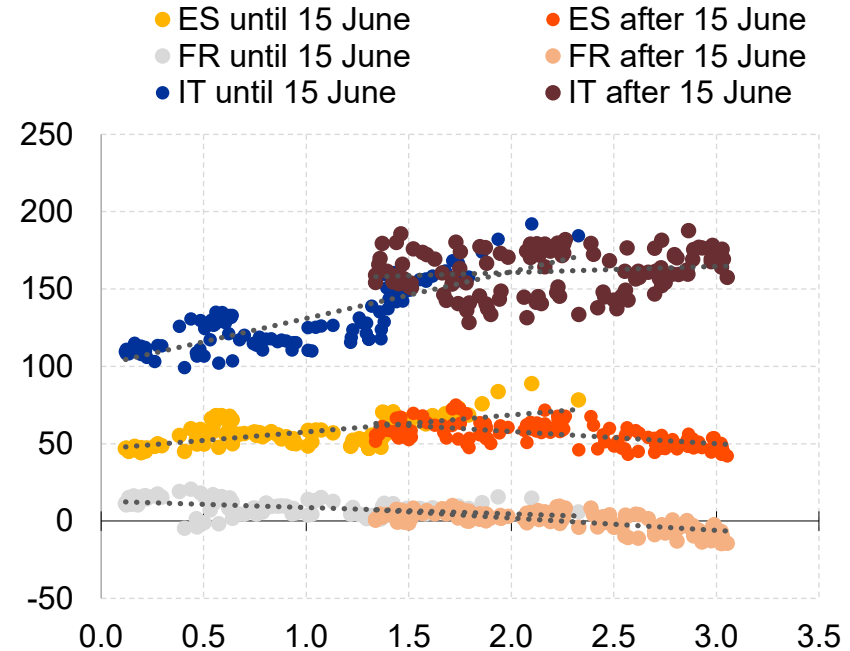
(Basispunkte)



Sources: Bloomberg.
Latest observation: 24 November 2022.

Sensitivität von Staatsanleiherenditen gegenüber geldpolitischen Erwartungen (Basispunkte)

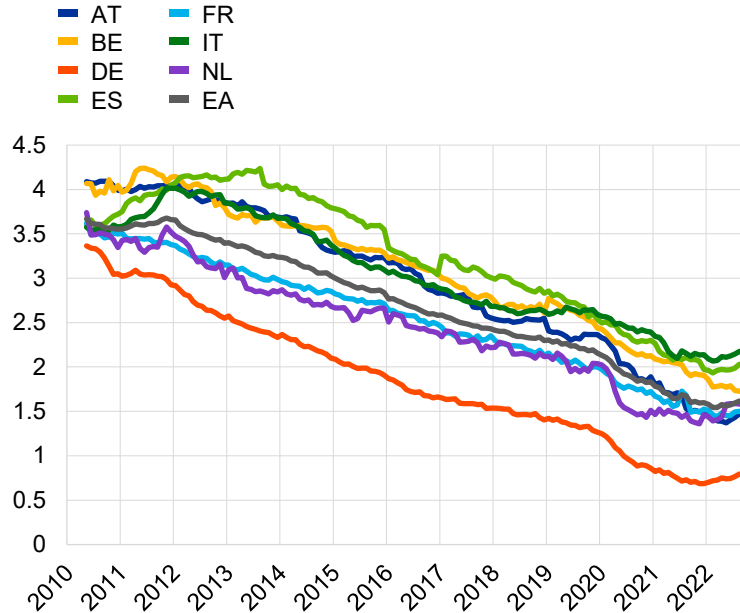
(Basispunkte)



Sources: Bloomberg, ECB calculations.
Latest observation: 24 November 2022.

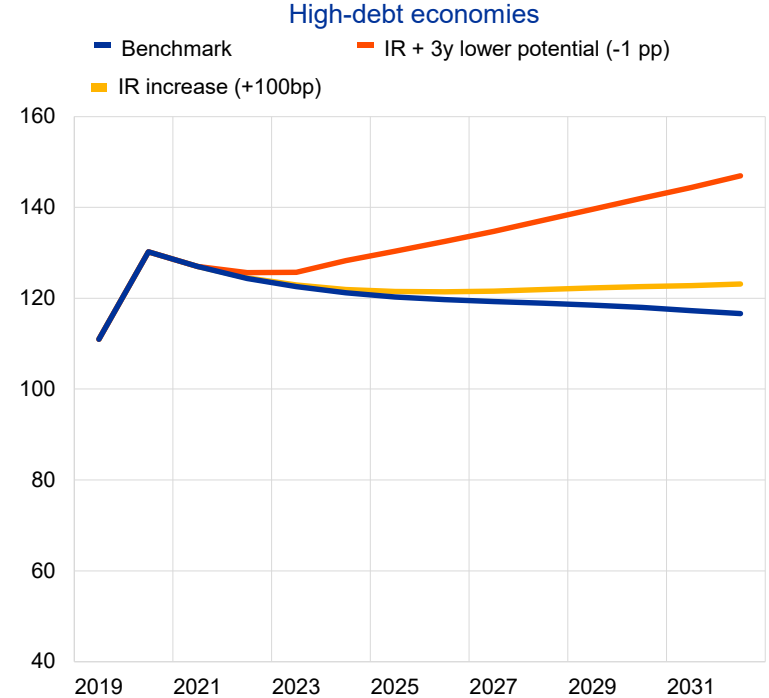
Wachstumspotenzial wichtiger für Tragfähigkeit der Staatsschulden als Zinsniveau

Durchschnittliche Zinsen auf ausstehende Staatsschulden (% pro Jahr)



Sources: ECB and ECB calculations.
Latest observation: October 2022.

Effekt von Zins- und Wachstumsschocks auf Staatsschuldenquoten (Prozent)



Sources: European Commission and ECB calculations.

Notes: High-debt economies are countries with a debt-to-GDP ratio exceeding 90% in 2019. Interest rate shock assumes permanently higher interest rates by 100 basis points (bp) across countries and maturities. Potential growth shock assumes potential growth lower by 1 percentage point (pp) for three years, implying permanently lower potential output levels.

Vielen Dank für Ihre Aufmerksamkeit!